

*The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

### 8.16.5 LINAC Beam Stop Cooling System

### Hand Processed Changes

Approved: Signature on File \_\_\_\_\_ Date \_\_\_\_\_  
 Collider-Accelerator Department Chairman

C-A-OPM 8.16.5 (W)

## **8.16.5 LINAC Beam Stop Cooling System**

### **1. Purpose**

To provide operating instructions to the Water Systems technicians for the LINAC beam stop cooling system.

### **2. Responsibilities**

Water Systems technicians start and stop this system.

### **3. Prerequisites**

3.1 Startup - Request permission from LINAC control and MCR.

3.2 Shutdown - Request permission from LINAC control and MCR.

3.3 Qualified and trained Water Systems technicians.

### **4. Precautions**

4.1 Verify that radiation monitor is on and observe monitor level. If indicator is in yellow or magenta zone call a Radiation Control technician.

4.2 Do not operate pumps without water or with valves closed.

### **5. Procedure**

5.1 Verify that water level is within operating limits as marked on the beam stop expansion tank pressure gage (10- 15 psi).

5.2 Verify that cold water makeup valve is open for automatic makeup.

5.3 Vent piping at high points.

5.4 Open suction and discharge valves on selected pump.

5.5 Roll pump shaft by hand.

5.6 Turn on starter disconnect switch.

5.7 Start pump at local start/stop station.

5.8 Check system pressure (135 psi) and temperature (75°) for proper settings and operation.

- 5.9 Observe pump operation and restore alarms.
- 5.10 Open cold water supply valve to heat exchanger.
- 5.11 Observe resistivity and place deionizer on line if less than 0.3 megohm-cm. Verify deionizer flow is approximately 5 gpm. If resistivity is above 1 megohm-cm, leave deionizer off line.
- 5.12 For shutdown, turn off pump at local station, turn off suction and discharge valves, cold water valve to heat exchanger and secure alarms.

**6. Documentation**

None

**7. References**

- 7.1 LINAC flow diagram and Inst. schematic BNL Drawing #D-34-M-0194-4.

**8. Attachments**

None